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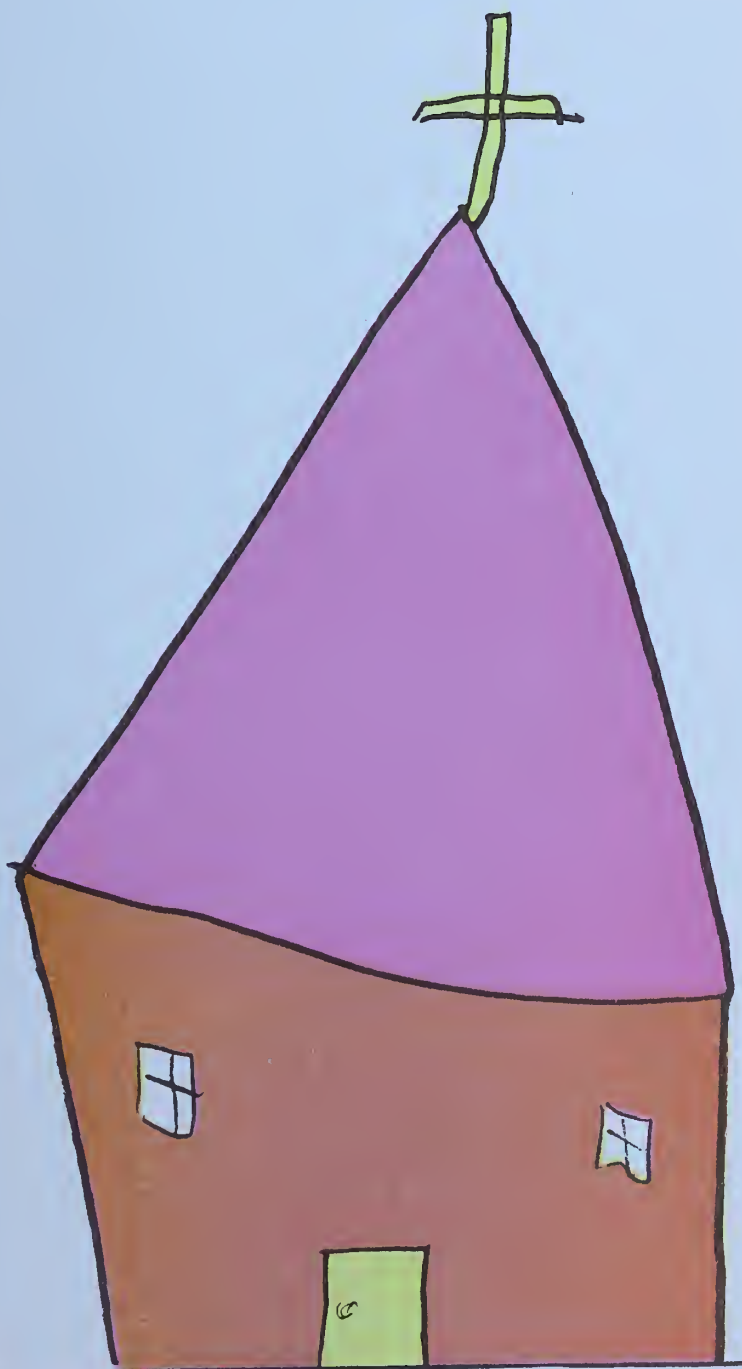
THE
Rocky Mountain

Leader

March, 1969
Vol. 68 No. 7



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1969 School Calendar

JANUARY

22 Wednesday ..... Semester exams
23 Thursday ..... Semester exams
24 Friday ..... Semester exams
End of Second Nine Weeks
31 Friday ..... Primary Party

FEBRUARY

5 Wednesday ..... Parents-Teachers-Houseparents Assn. Meeting, **8:00 P.M.**
14 Friday ..... Primary Party
28 Friday ..... Gallaudet Day Program, **3:00 P.M.**

MARCH

5 Wednesday ..... Parents-Teachers-Houseparents Assn. Meeting, **8:00 P.M.**
13 Thursday ..... Gallaudet College Entrance Exams
14 Friday ..... Gallaudet College Entrance Exams
21, 22 Friday, Saturday ..... Annual Play, at College of Great Falls, by Dept. of Visually Handicapped
22 Saturday ..... Boy Scouts Klondike Derby
28 Friday ..... End of Third Nine Weeks

APRIL

3 Thursday ..... Travel Home for Easter
7 Monday ..... Students Return
8 Tuesday ..... Classes resume
12 Saturday ..... Boy Scouts Camping
13 Sunday ..... Boy Scouts Return
14 to 18 Monday through Friday ..... Achievement tests
25 Friday ..... Arbor Day

MAY

2 Friday ..... Boy Scouts Leave for Camping
4 Sunday ..... Boy Scouts Return
7 Wednesday ..... Parents-Teachers-Houseparents Assn. Meeting, **8:00 P.M.**
Boy Scouts Court of Honor Awards
23 Friday ..... Primary Picnic
30 Friday ..... Holiday, No Classes

JUNE

3 Tuesday ..... Final exams
4 Wednesday ..... Final exams
5 Thursday ..... Final exams
6 Friday ..... Students dismissed for summer

Boy Scouts will meet every Wednesday at 8:00 p.m. except Wednesdays on which there is a scheduled P.T.H.A. meeting.

Girl Scouts will meet on the first and third Tuesdays at 8:00 p.m.

Student Council, Dept. of Visually Handicapped, meets alternate Wednesdays at 7:00 p.m.

THE
Rocky Mountain
Leader

March, 1969

Vol. 68 No. 7

Floyd J. McDowell, Editor
J. William Lenth and Philip Vedovatti, Assistant Editors

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Rochester Method Advocated . . .

Education and the Prelingually Deaf Child

By Edward L. Scouten

Principal, Florida School for the Deaf

(An address at the 30th anniversary banquet of the Rochester (N.Y.) Civic Assn. of the Deaf, Dec. 7, 1968)

I. Our Predicament

Educators of the deaf like all professional people are very conscious of their image. It is the positive image that enables a patient to have faith in his doctor or dentist. It is equally important that the parents of deaf children have faith in those people who teach their children.

Our image and self-satisfaction as teachers of the deaf were both fairly well preserved up until about 10 years ago when some educators began to feel a dissatisfaction with the lack of progress and achievement evidenced in the graduates of schools for the deaf.

Failure obviously does not enhance the image of the profession involved. Hence it is natural that our failures were and still are being quieted. Quieting a serious problem does not resolve it; and like Banquo's ghost it rises again and again to mock us.

A few years ago a federally-supported investigation produced the Babbidge Report which confirmed what many educators of the deaf had quietly suspected for a long time: Our efforts at teaching the deaf are not exactly successful. While the B a b b i d g e Report provided much criticism, it offered no answers to our tremendous problem which is fundamentally, first, last and always that of teaching English to deaf children.

In 1965, a well-known educator of the deaf, the superintendent of a leading New York oral school for the deaf, wrote in **The Volta Review** that while schools for the deaf now have numerous improvements, the boys and girls who are graduated today cannot talk, lipread, read nor write any better language than the graduates of schools for the deaf back in 1940—25 years ago. In other words with all of our improvements, schools actually have not progressed one bit in 25 years! This is, indeed, a sobering thought, especially when we realize that the intelligence of deaf children follows the normal curve.

The question arises, if our deaf children have the brains what are we teachers doing? The answer comes back, that following human nature most of us are searching for excuses for our failure.

The most common of these excuses are:

We have so many multiply handicapped! We have so many aphasics! In Europe an ancient excuse is that the language handicap is inherent in deafness. The continued fact of the deaf child's intelligence, however, proves this excuse to be an invalid one. Thus, we educators of the deaf are working hard to keep our i m a g e. To be sure, it is very embarrassing.

The pure oralists with their strong emphasis upon speech and lipreading are countered in their efforts by their diametrically opposed colleagues, the proponents of the simultaneous method who emphasize the use of signs and occasional fingerspelling as a supplement to speech and lipreading. Thus is perpetuated a schism and conflict which has continued for almost 100 years.

For the sake of their mutual image, the two factions have carried their conflict underground. As a result of this surface peace, our federal government, convinced that all is well, has poured millions of dollars to relieve the plight of American education of the deaf. Panaceas abound today in the form of visual hardware, teaching machines and various programs. Thousands and thousands of dollars are spent on weird signs and symbols of all varieties. Not one innovation, however, even comes close to giving English to our deaf children. The simple reason is that our perspective of the problems of deafness, deaf

Education and the Prelingual Deaf . . .

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children and their language learning is generally "hearing oriented."

We are endeavoring to make the answers to the problems of 1938 fit the problems of 1968. This, of course, is impossible because the total picture of education of the deaf is completely different from what it was 30 years ago, 20 years ago or even 10 years ago.

It is clear that the two long standing factions, the pure oralists and the simultaneous method proponents, are neither right; otherwise, the Babbidge Report would have been a document of praise instead of one of embarrassing criticism. The truth appears to be that we educators of the deaf and deaf leaders alike must take a totally new view of the deaf child and his educational problem.

II. A Consideration of the Problem

We must consider a wholly different philosophy of education, one that m a y look strange to both the pure oralists and to the signmakers alike. Let us suggest that it had better be different, if the long-continued impasse in our profession is ever to be resolved.

For starters let us quickly review.

When the hearing child is two months old, he can say "Wa." At two and a half months he can say, "Watee." At two years he can say "water." Thus, we see the development of a single word. Every word the small hearing child learns, evolves in this manner. The child is able to do this because he perceives thousands and thousands of word impressions through his ear. Abstract words like **a, an** and **the** as well as concrete words like **water, car** and **ball** are heard again and again. Perceiving, the child imitates; imitating the child learns and so his knowledge of words and and syntax (sentence sense) grows. By the time he is two years of age the child can speak two-word sentences.

Finally at the age of five and certainly by the time the child is six, he can both understand and express himself quite well through our English language. By this time he will have all of syntax (sentence sense) he will ever need as well as a working vocabulary of 3,500 to 4,000 words.

If deafness or partial hearing loss occurs after the age of five, the unfortunate child is lucky in an educational sense solely because he has a solid command of the English language. Fundamentally, his educational development and growth need not be too different from that of his regular hearing peers. For him education in a school for the deaf is seldom a challenge. Learning is fairly easy for him because he has English as well as speech. Such a child is termed **postlingually deaf.**

III. Our Changing School Population

Twenty and thirty years ago the populations of our schools were in a large per cent postlingually deaf. The great majority of our outstanding deaf leaders in the past as well as in the present were and are in the postlingually deaf category. Blessed with hearing through the first four, six, eight or ten years of their lives, these postlingually deaf people retained their precious gifts of speech and language. These two gifts clearly helped them later to open the doors of education and eventually to secure worldly success. During their years in the schools for the deaf these people became adept in the language of signs. They could easily learn signs without causing difficulties for themselves because they already had strong foundations in speech and English. While these postlingually deaf people have become the influential leaders of the deaf community, it is interesting to note that **they are basically hearing people in their understanding of life and the world.**

As time has passed the scene has changed in our schools for the deaf. Today we no longer have the great numbers of postlingually deaf children. Instead we have an ever-growing percentage of pre-lingually deaf children who present a wholly different instructional problem.

This group of children possesses no established symbol system whatsoever—no oral English, no written English and no sign language. They bring to their teachers the human mind in its pure state, Locke's **tabula rasa.** These pre-lingually deaf children know neither time nor place. For them the abstract world is nil. Their education is possible only because of their own stubborn determination and the grace of intelligence. They often

appear to learn in spite of the system and not because of it.

Almost all of us teachers of the deaf agree regarding the high intelligence of prelingually deaf children. Yet many of us are confounded as to the reasons for our continued failure to teach them successfully. The old stalemate between the pure oralists and the signmakers continues. Pride, ignorance and blind loyalty to the past seem to perpetuate our failures as teachers of deaf children.

We suggest that a new view of the prelingually deaf child and his deafness be studied and considered not only by hearing teachers of the deaf but by the postlingually deaf leaders who are themselves **basically hearing in the vital areas of speech and English.**

IV. The Pure Oral Method

Let us consider briefly the pure oral method not as people blessed with hearing or as people who were once blessed with hearing. Let us instead think about the pure oral method subjectively and look through the eyes of a prelingually deaf child. Let us try to see what he sees and at the same time notice what he does **not** see. Herein we may perhaps learn something.

First, we all know the motto of American education of the deaf: "Talk, talk, talk to the deaf child." The premise upon which this concept is based is, of course, lipreading. The idea being that the child seeing language on the lips all day every day will come to recognize words, phrases and finally whole sentences. Parents, teachers, friends and neighbors, therefore, talk, talk, talk grammatically. They articulate and enunciate clearly. They know that "some words cannot be seen on the lips"; and still they talk, talk, talk. This continuous effort by succeeding generations of parents and teachers has obviously failed—otherwise there would have been no Babbidge Report.

Let us for once look at a single, simple sentence written by a prelingually deaf child of seven who has been in school two years. He proudly writes:

I have ball.

Now let us look at the sentence "I have a ball" as observed by the lipreading deaf child. Let us see how he **sees** this same sentence on a speaker's lips.

ah-ee ( ) a ( ) ball.

While teachers may or may not know better, parents and laymen generally believe that when grammatical English is orally spoken to the deaf child, that it is grammatical English that is coming through to him. However, if we look through the prelingually deaf child's eyes we can see immediately that this is not true.

The long accepted statement that, "Some words can be seen on the lips and some cannot," becomes wholly erroneous if we look at it through the deaf child's eyes. Through his eyes we become aware that he does not see words at all but only movements —lip movements or lip signs. The lip movements present to him a broken pattern of language which he sees, imitates and learns.

In that 90 per cent of a prelingually deaf child's learning, both in and out of school, comes through lipreading, it would appear that we teachers and parents alike have been inadvertently drilling and reinforcing the child in broken English through our well-intentioned efforts to communicate with him. What the prelingually deaf child **sees** is obviously what he imitates and learns. Hence our finest oral efforts have in actuality compromised the child's visual zone of perception. We have given him fragmented linguistic models to see, imitate and learn. In doing this, nothing but failure could possibly result from our efforts.

We will remember that the normal hearing child or postlingually deaf child during his linguistic years, from birth to the age of five, requires hundreds of thousands of aural exposures to master a simple concrete word like **water, car** or **ball.** He, likewise, requires hundreds of thousands of aural exposures for such a simple abstraction as the article **a.** At the same time we expect a prelingually deaf child to learn the article **a** after a few hundred visual exposures. Then we are nonplused when he cannot.

The article **a** in lipreading we may observe is **wholly invisible.** Yet we are surprised when the child cannot learn what he can neither hear nor see. It appears that the act of learning for him is compounded in its difficulty by transforming it into one great guessing game. With the paucity of visible language impres-

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Education and the Prelingual Deaf . . .

Continued from Page Three

sions he receives, it is a miracle that the average prelingually deaf child can learn English as well as he does.

V. The Simultaneous Method

At the other end of the spectrum of methodology opposing the pure oral method we find the simultaneous method which historically is quite new. It combines the sign language as a supplement to speech with fingerspelling used occasionally to cover proper names and words for which there are no signs. This procedure differs from that used in the early education of the deaf, in that long ago signs and occasional fingerspelling were used in teaching without oral speech. The emphasis 75 or 100 years ago was upon the concept to be conveyed and not upon English syntax. This ancient procedure disappeared from our schools at the turn of the century.

The simultaneous method per se was conceived in the early 1950's in desperation to meet the failure of prelingually deaf college students to use or comprehend English adequately. Communication through sign language is ideal for conveying ideas; and it is excellent short-cut medium. Esthetically signs have been developed into an art form comparable to ballet.

On the college level for postlingually and prelingually deaf students **who have strong foundations in both receptive and expressive English** the simultaneous method in instructional and social communication is a tremendous help.

For preligually deaf children, however, who have limited vocabularies and for whom English language is still very fluid the sign language or any other foreign symbol system will merely deprive the children of the opportunity for seeing, imitating and learning English. Many hearing-oriented teachers and postlingually deaf leaders will frequently suggest that this objection may be overcome if signs might follow the English syntax order. In reply we may say that rearranging the order of a non-English symbol system does not change the inherent nature of the symbols used.

The prelingually deaf child reflects in his oral and written English only that which he **sees** and that which he imperfectly hears. Consequently the simultaneous method like the pure oral method compromises the prelingually deaf child's visual zone of perception by giving him fragmented linguistic models to see, imitate and learn. In short, this is what the Babbidge Report is all about.

With all of this, our national and state organizations of the deaf at the behest of many strong and influential postlingually deaf leaders, espouse the non-English simultaneous method of communication in our schools for the deaf. Thus the gulf which separates the two great factions in American education of the deaf further widens and our failures continue.

VI. The Rochester Method

Zenas Freeman Westervelt of Rochester, N.Y., supported the idea that if deaf children could **see** English completely all day, every day, both in school and out, they would learn English. Although a strong oralist, Westervelt recognized both the importance and weakness of lipreading in educational and social situations.

To preserve lipreading Westervelt reinforced it with a visible English medium commonly known as fingerspelling. As a teacher speaks orally, he at the same time fingerspells to supplement and complement the fragmented syntax presented by the lip movements.

The prelingually deaf child focuses his attention upon the teacher's lips while his peripheral vision perceives the teacher's visual English (fingerspelling) filling in the oral language gaps. Seeing the total English pattern, the child has a fighting chance to imitate and to learn. The mastery of basic English syntax must occur during the first five or six years of school. Not succeeding in this, the child will probably have language problems the rest of his life.

Speech training is an integral part of the Rochester Method, and continues in the regular manner of the oral method. Speech acquisition progresses more rapidly because the child is motivated by his ever-increasing vocabulary and desire for self expression.

Auditory amplification is also a vital aspect of the Rochester Method. Development of a child's residual hearing is encouraged in order to provide him with an additional sensory avenue, if possible. In effect the Roches-

ter Method is an oral multisensory approach, a kind of eclectic procedure which utilizes the positive features of the traditional methods.

The two basic principles for successful learning under the Rochester Method are:

1. Provide uncompromised perception both visual and aural.
2. Provide a multiplicity of visible and audible English exposures.

Empirical evidence to date suggests that a consistent adherence to these two principles enables the prelingually deaf child to acquire acceptable English, both receptive and expressive. With the key of English, the doors of education are easily opened.

VII. A Summary

In the light of a growing and changing deaf population, we urge educators of the deaf and especially postlingually deaf leaders to encourage our schools to use those English media which prelingually deaf children can **see.** If we continue to compromise visual perception with non-English signs and symbols, we will condemn the vast majority of today's deaf children, tomorrow's deaf population, to a future of ever-increasing social mediocrity and economic dependence. It is our duty to see that this never happens. — THE DEAF AMERICAN, Feb. 1969.

Classroom Chatter

from the Department for the Deaf

Corrected

Saint Valentine's Day

February 14 was Saint Valentine's Day. We made some Valentines. We gave them to our friends. We opened our Valentine box February 14. We got many pretty Valentines. We had a party. We had a good time.

—Pre-First Grade

Our Valentine Party

We had a Valentine party February 14. The gym was decorated with hearts and cupids. We played musical chairs, a Valentine game, ice fishing and jumped erasers. We liked our favors.

We had ice cream, Valentine cookies and punch for refreshments.

We had fun at the party.

—Pre-First Grade

Barbara's and Richie's Birthdays

November fifth and seventh were Barbara's and Richie's birthdays. They were six. We had two parties. We cut out some pretty leaves. The table was pretty. We put six candles on each cake. We had ice cream, cake, punch and candy.

We had some big balloons.

We played games.

We had fun.

—Pre-First Grade

Our Candy

Richie and Chris had some nuts. We made some candy one afternoon. We got a big pan.

Chris put some sugar in it.

Mike put in the cocoa.

Joe J. put in the syrup.

Joe L. put in the milk.

Barbara put in the marshmallows.

We cooked it on a hot plate.

Then Carla put in some butter and Richie put in the nuts.

We had fun eating the candy.

—Pre-First Grade

Our Flowers

Last fall we planted some flowers. We watered them. They grew fast. They have white and red flowers on them now.

—Barbara Ryan

Our Sweet Potato

We planted a sweet potato and a carrot in some water. The carrot did not grow. The sweet potato grew fast. Now it has many little white roots and long green vines. It is pretty.

—Chris Bizicki

Apples

We went for a walk one morning. We found many red apples and a few big yellow apples. We ate the yellow apples. The red apples were little and sour. We did not eat them.

—Richie Hall

A Big Dog

We went to Miss Rankin's house one afternoon. We saw a big brown and white dog. He

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Around the World

SHIFTING SANDS—The sandbox is being prepared by Mrs. Olson (left) and Mr. MacArthur (right). The Nile River runs through the valley in this diorama. Staff photo

Under the direction of Mrs. Diane Olson and Mr. Dave MacArthur, Classes 3 and 4 are experiencing a team teaching approach to learning in the areas of social studies and science.

In their imaginary tour around the world, they have been seeking a better understanding of people and their cultures. The major purpose of this class, however, is to give the students a variety of experiences which in turn gives them a basis for written expression.

Last September they began their study in Japan and have now traveled through the countries of South America, Australia, Mexico, Scandinavia, and Egypt. Presently they are studying the Netherlands.

Time does not permit an extensive study in any one place, but they do try to compare and contrast each country to their own United States.

The pictures in this Leader show only a sample of the various types of activities they are engaged in. Along with movies, filmstrips, lively demonstrations, and activities within the classroom; the students have learned a great deal about their world through field trips. They also have the opportunity to enjoy the foods, dances, types of art, and types of music peculiar to each country they study.

Mrs. Olson and Mr. MacArthur feel this has been a very worthwhile undertaking and believe that the goal of this class has been reached.

Pyramids

Mrs. Olson asked us who built the ancient pyramids. I told her the Egyptians did.

Mr. MacArthur made a small pyramid. He picked me to put the ramp on the pyramid. Semelee tied string around the block. Joe and Howard pulled the block to the top of the pyramid.

Next we built a large pyramid. Joe was the Egyptian king. The other children were slaves. The slaves worked very hard. The ramp fell down. The Egyptian king said, "Pick it up." So I did. Finally the pyramid was finished.

—Gail Pace

Egypt

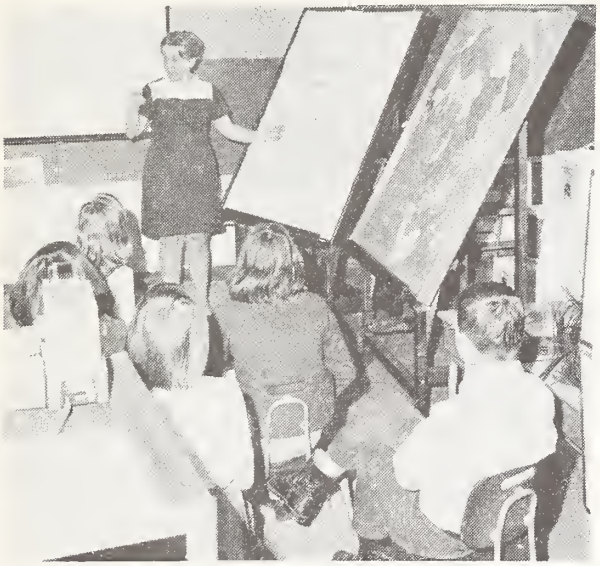
We learned about the Egyptians. We learned that the kings were called Pharaohs. When a king died, some people carried the king to his pyramid. Some of the Egyptians put food in the tomb. They thought the king would come back to life again. He would eat the food. But we do not believe that.

—Darcie LeMieux

The Nile

Ma-bah-lay-o!
Ma-bah-lay-o!
O thou mighty river, Mother of all.
Far distant region springing.
Thro' yon fertile valley singing.
Flowing along, blessed your song.
Water to Egypt bringing.
Ma-bah-lay-o!

SUNG IN E FLAT—An Egyptian song relates the importance of the Nile River to the dry, hot lands of Egypt. Staff photo



PANEL DISCUSSION — Mrs. Olsan is using a board af questions ta stimulate discussion. Staff photo

EASY DOES IT—The "slaves" with crepe paper wigs are using an inclined plane to complete the pyramid. "Pharaoh" Joe Manzer can be seen in the upper right background. His headgear is a small hand towel! Staff photo

AROUND THE WORLD IN 180 DAYS?—A plaster of paris model of our earth proves useful in various classroom activities. Pictured are: (Front row, left to right) Donald Fink, Laurie Mullins, Donna Christensan; (Second row, left to right): Dick Stokes, Howie Hammel, Joe Manzer; (Far back, left): Semelee Lake, Rita Lux; (Far back, right): Tina Braden and Brenda LeMieux. Staff photo

FRIENDS—Life-size cut-outs bring to life the costumes of children from other lands. Above are: (Bottom, left to right) the cutouts of Ted of Australia, and Ahmad of Egypt; (Back, left to right): Kirstin of Norway, Yoskika of Japan, Juan of Mexico, and Rosa of Brazil with parrat. Above are the flags of respective country. Staff photo

New Findings of a National Study . . .

Educational Implications Of Partial Vision

By Ralph L. Peabody and Jack W. Birch

EDITOR'S NOTE—This article came to our attention through one of our teachers who got it as a mimeographed handout at summer school. We hope the authors won't mind our reprinting this article for our readers to enjoy.

THE TYPICAL PARTIALLY SEEING CHILD: The following composite portrait is drawn from real life. The description highlights facts hundreds of teachers contributed about their own pupils. Over one thousand partially seeing children in more than a dozen states were in the national study. The youngster portrayed, whether boy or girl, is 12 years and nine months old as of September 1, 1966. Compared to sixth graders in general the partially seeing child is one year and nine months over-age for grade. He lives at home with his natural parents. The family can be counted upon to be cooperative with the school, with the degree of cooperation ranging from mild to strong.

At school he is in a special class with a teacher of the visually handicapped. If he were not in a special class his next most likely placement would be in a resource type program. He has been enrolled in a special education program for almost five and one-half years, since he was just past seven years old.

In view of this teacher the most significant educational attribute of his vision disability is fatigue. His vision defect, as certified by an opthalmologist, is a refractive error, myopia, and his far point visual acuity is between 20/70 and 20/200. The disability is congenital and it has stabilized. His teacher has no information about his visual fields or his near point visual acuity, though if she did she would find that the latter is somewhat superior to his far point acuity. He has no other educationally significant handicap, but if he did it would most likely be what the teacher would judge to be an emotional problem.

He can read any type size in the 12 to 24 range though not with equal ease. While he will be able to read more efficiently and effectively in one type size it is likely to be different from the type size most satisfactory for four out of five of his classmates. There will be no relationship between the size he finds most satisfactory and his far point visual acuity. Whatever type size he uses with most success he will use a reading distance of 6.5 inches and he will not use a visual aid in reading other than his regular correction.

He does better in school work involving reading if he is given extra time to complete it. His teacher rates his overall achievement at grade 5.6, with his poorest achievement in reading and spelling and his best in music and physical education. The teacher is correct in estimating his overall achievement to be below his sixth grade placement, but she does not estimate it as low as it proves to be when measured by a standardized achievement test.

Under optimum conditions of type size, freedom to use vision aids, and relaxed test time limits he shows an overall achievement of grade 5.4 when his grade placement is 6.4. His most serious academic weaknesses are in science, social studies, and language, where he earns grade equivalents of 4.9, 5.0, and 5.0 respectively. His highest achievement is in arithmetic computation, with a grade equivalent of 5.7.

He has an intelligence quotient of 96. It is likely that a group test was used, which would underestimate his intelligence, at least to a modest extent, if it were administered under standard time conditions. Therefore, it might be appropriate to assume that his intelligence quotient is at least 100.

Educationally, the most important feature of the portrait of the typical partially seeing sixth grader is his underachievement. Since his intelligence is probably average, his grade expectancy can be determined by reference to the grade in which he would be for his age. That, for a child of 12 years and nine months age, should be the end of seventh grade or the beginning of eighth grade, depending upon the minor differences in admission age from state to state. Considering that his actual measured achievement of grade 5.4 was made at mid-term it becomes clear that the youngster is approximately two and one-half years retarded academically, as based on age and mental ability.

The blending of otherwise distinctive elements sometimes blurs important qualities. That may be the case here. It is certainly so with respect to the relative charm of the children's smiles and the freckles on their noses. But the more educationally significant qualities remain clear. If the sketch of the American partially seeing sixth grader is correct in its essentials, certain implications stand out.

Discussion and Implications

The preceding section, "The Typical Partially Seeing Child," is a summarization and analysis of the research data of the study, presented in a narrative form. The complete project was very comprehensive and the analysis of data indicated implications not only for special education practices, but also for vocational rehabilitation, teacher education, and research. To make meaningful applications and interpretations of the conclusion and implications of the study, the reader is strongly urged to review the study in its entirety so that decisions will not be made on partial information. The selection and characteristics of the sample population, the lack of a previously defined or well-recognized universe of partially seeing children, and the research procedures and analysis of the data, all contribute to the strength of the study as well as influence the consumer's utilization of the research conclusions.

Due to space limitations in a summary such as this, discussion is being limited to a few selected implications for special education practices. The reported characteristics and standardized achievement scores of the 1,084 fifth and sixth grade partially seeing children from 12 states and four additional cities were analyzed. The data indicated that the main task of special education for the partially seeing is corrective and remedial teaching in the skill area of reading and arithmetic, as well as content areas such as science, language, and social studies. As was previously indicated, the academic level of the subjects was two and one-half years behind that which would normally be expected.

Goals for pupil achievement need to be set in terms of the best estimates of the learning capacities of the children. Teachers should use information from mental ability tests and set objectives in terms of achievement expectancy for mental age. Thus, the hidden retardation resulting from overageness for grade will be revealed and higher expectancy levels will be realized.

Other factors possibly contribute to the age-grade relationship found. Information was collected on the numbers of years the subjects had been in special education. When compared to the mean ages of the subjects, it can be shown that placement in special education programs took place, on the average, when pupils were between seven and seven and one-half years of age. The collected data did not indicate whether that was due to placement policy, inability of the child to perform (failure in regular class) or what the circumstances of the decision might have been. The data did, however, indicate that the disability occurred prior to the subject's second birthday for more than 70 per cent of the subjects, and that nearly four out of five disabilities were diagnosed before the fourth birthday. Thus, this investigation's results and conclusions imply strongly the need for increased emphasis on two educational procedures. First is preschool identification and planning for partially seeing children. The most important parts of the preschool assessment should be a full delineation of the nature, extent and prognosis of the vision disability and a thorough analysis of the educational needs and potentialities of the child. Put together, these should point the way in a second procedure, a special education plan to be initiated when the child begins school. This should be a considered decision with progress being observed and aided as necessary through special educa-

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Educational Implications . . .

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tion, rather than just a placement "to see how he gets along," with special education called to the rescue after failure behavior becomes apparent.

The scores obtained from five forms of the Metropolitan Achievement Tests administered in five type sizes (12, 15, 18, 21, 24) revealed that close to one-fifth of the subjects achieved their highest score on each of the five type sizes. The results lead to the conclusions that reading speed and comprehension and visual acuity and type sizes are not educationally significantly related in partially seeing children. This leads to the following implication: Curriculum materials need not be limited to a particular type size for the majority of partially seeing children. The lack of materials in a specific type size need not deter the teacher from using whatever instructional materials are available which will enhance the children's educational opportunities, unless there is definite medical evidence that such materials might be harmful to the individual child. While partially seeing children generally are able to read in type ranging from 12 to 24 point sizes, there are individual differences among the type sizes on which their reading performances are best. Relative to the problem of determining a suitable type size for an individual partially seeing child a regression equation approach was taken to demonstrate its potentiality. This statistical procedure indicated that a relatively small number of variables properly weighted and applied to a prediction formula could materially increase the precision of the initial selection by the teacher of suitable type sizes for instructional materials.

A review of the research literature as well as the clinical impressions of teachers has continuously drawn attention to the educational handicap of reduced reading speeds of partially seeing children. To verify this information, the Stanford Achievement Test was administered under timed and untimed (power) conditions to 214 partially seeing sixth grade subjects and 532 normal fifth and sixth grade subjects. The partially seeing subjects did demonstrate their achievement more adequately (through significantly higher scores when compared to the normal subjects) under conditions which reduced the time pressure. It is recognized that more time is needed for study by most partially seeing children than is usually needed by non-handicapped children. Deliberate instruction aimed at improving study habits may reduce that need somewhat. Other efforts need to be directed at directing the educational handicaps occasioned by reduced reading rates. One such effort would be to deliberately attempt through systematic instruction and practice to increase reading rates while maintaining high levels of comprehension.

The consequences of vision defects as they affect the process and the substance of education form the rationale for special education for partially seeing children. Presumably the kind and degree of impairment bears some relationship to education, particularly when the disability cannot be corrected sufficiently to bring it into the normal range required for effective visual functioning in typical school tasks. Therefore, teachers of partially seeing children need to know whatever educationally relevant facts can be determined about the vision of their pupils. The visual characteristics of the sample population are reported in their entirety in the final report of the study. This information is of utmost importance and merits careful review rather than summarization.

The lack of medical and visual information available to the participating teachers has important implications. Data considered highly important by authorities in the field on a prior basis such as visual acuity (near and far point), visual fields, and prognosis were frequently not available to teachers. In fact, an adequate analysis of the possible educational relevance of some medical data could not be made because it was not at hand to be studied. So long as teachers have only fragmentary findings about the medical aspects of their pupils, it will not be possible to apply objective procedures to determine their possible relevance to education. Most extended use of carefully prepared standard medical report forms should alleviate the present condition of limited knowledge available to the teacher.

The cooperation and interest of school personnel in the conduct of this research project and the responses to the final report have

indicated a sincere interest and concern relative to the education of partially seeing children. Further study and research must continue in relation to the education of partially seeing children. Traditional educational practices must be carefully re-examined and new knowledge and procedures must be developed if the partially seeing child is to reach his potential development.

Classroom Chatter

from the Department for the Blind

INTERMEDIATE

In science class we studied about the simple machine and the complex machine. There are six kinds of simple machines: the lever, the pulley, the wheel and axle, the inclined plane, the screw, and the wedge.

The complex machines are made up of simple machines. The doorknob is a wheel and axle, or simple machine.

—Arnold Bernhart

We have magic rocks we planted in a solution. They grew overnight into different shapes and size. They are colored and very pretty.

—Arnold Bernhart

We had a Valentine box in our room and exchanged Valentines. We also had a Valentine tree. Friday evening we had fun at our Valentine party.

—Tammy Eshleman

For math we are learning our multiplication tables. When we know these real well we will use the abacus to multiply.

—Margy Bond

Friday after school Arnold and I got to go home with Mrs. Stafne. We had dinner at her house and had fun.

—Chuck Laib

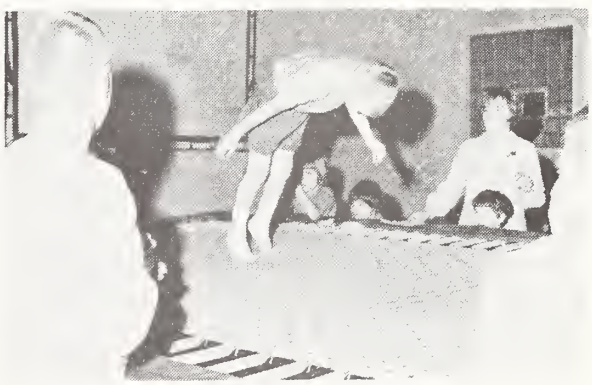
Since this is March we put up our fluffy cotton lambs on the bulletin board. We hope we won't have to put up the lion when March comes to an end. We don't want any more bad weather.

—Vicki Burgett

Dept. for Visually Impaired Presents Trampoline Shows

The Department for the Blind presented two trampoline shows. The first one was March 5th for the Parents-Teachers-Houseparents Assn. and the other one March 7th for an assembly at the school.

DONALD ORR doing a front drop. Staff photo



BILLY ABELE about to do a forward flip. Staff photo

VICKI BURGETT executing the swivel hips. Staff photo

Classroom Chatter, Dept. for Deaf . . .

Continued from Page Five

was in a dog-yard. His name was Ring. We patted him. He wagged his tail. He was friendly.

—Chris Bizicki

Our Wagon

We have a red wagon. We like to play with it at recess. We take turns pulling, pushing and riding. We like to go fast. We have fun.

—Joe Jeffery

An Airplane Ride

I went home.
I rode in an airplane.
It flew fast.
I had fun.

—Carla Howe

Our Fish

Jon Mullins had some fish. He gave us four fish. They are red and yellow.

We feed them every day. They are growing. We like to watch them swim.

—Joe Laverdure

Swimming

I go swimming every Friday. I like to swim. I have fun.

—Mike Allison

Pigeons

We went for a walk one afternoon.
We saw some pretty birds.
They were gray, blue, brown and yellow.
They were pigeons.
They said, "Coo, coo, coo."
We stopped and looked at them.
After a while they flew up on a house.

—Richie Hall

A Walk

We went for a walk one day.
We went to the old barn.
We saw a pony and four brown horses.
We pulled some grass and gave it to one horse.

—Barbara Ryan

Mike's Birthday

January 20th was Mike's birthday. He was nine. We had a party. The table was pretty. It had many little snowmen on it. Mrs. Roth came. We put nine candles on the cake. We had ice-cream, cake, punch and candy.

We had some balloons.

We played games. We had fun.

—Pre-First Grade

Helpers

My mommy went to the hospital. Grandma and grandpa came to help us. I helped daddy, grandma and grandpa. I dried the dishes. Now mommy is fine. I am happy. Grandma and grandpa went back home. They went on the train and the bus. I miss them.

—John Eide

To the Ocean

Mother, daddy and I will go far away next summer. I think we will go in the car. We will visit some friends. We will see the ocean. I never saw the ocean. Maybe I can play in the sand by the ocean. That will be fun.

—Gina Evans

The Park

Our class went to the park. The snow was deep. Ice was on the lake. The fish were under the ice. We did not see the ducks. They are in a house in winter. We played on the merry-go-round and on the little swings in the snow. I had fun.

—Curtis Garden

We saw some men on the lake in the park. They were putting water on the ice on the lake. People skate on the ice. We will have a picnic in the park. Then the grass will be green. The ducks will be on the lake. Our picnic will be in May. The park will be pretty.

—Topsy Toner

Fingerpainting

We fingerpainted some pictures. I fingerpainted a big deer. My deer has big horns. John made a clown. It was funny. Afterwhile I can take my picture home. Then I will show mother and grandmother my deer.

—Steven Kappel

This Month's Cover

Lynanne Holm is our artist for this month. She hails from Butte and is the daughter of Mr. and Mrs. Rodney Holm. Although only 8 years old, she is already able to think ahead to the future — Easter in this case. It is possible she is anxious to be home, too!

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Great Falls, Montana

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